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INTRODUCTION

Founded in 2002, Vector Structural Engineering has a staff of 42 in four offices in Utah and California. Our engineering team includes licensed civil engineers, seven of whom are also licensed structural engineers. The Vector engineering team has over 150 years of combined engineering design experience, supported by complete in-house Computer Aided Design & Drafting and administrative departments. Our engineers are licensed in all 50 states, the District of Columbia and Puerto Rico. With nationwide licensure as well as diverse experience and expertise, Vector Structural Engineering is uniquely positioned to provide engineering services for clients with regional and national engineering needs.

Vector's success is built on a foundation of technical expertise and outstanding client service. We place great emphasis on providing sensible, technically sound engineering solutions. Striving to do everything we can to make each project successful, Vector's corporate culture revolves around a sense of urgency and sensitivity to our clients' project schedules and budgets. The majority of our business comes from clients that have been with Vector for many years.

EXPERIENCE

Vector has developed expertise in the analysis and design of many different types of structures including: telecommunications structures and concealments, commercial and residential solar, government facilities, educational facilities, commercial and retail buildings, multi-family residential buildings, industrial facilities, retaining and drainage structures, free standing signs, and pedestrian bridges. Past project experience includes the design of thousands of telecommunication structures all over the country. Principal engineer, Roger Alworth, has been designing these types of structures for over 20 years.

Vector's experience includes the design of structures constructed of concrete, masonry, steel, timber, fiberglass reinforced polymers (FRP), and aluminum. Our design experience includes multi-story buildings, elevated post-tensioned concrete structures, specially reinforced concrete and masonry structures, free-standing and guyed towers, retaining structures utilizing soil-nails and micro-piles, foundations utilizing helical piers, drilled caissons and rock anchors, and steel structures utilizing buckling restrained braced frames (BRBF), special moment resisting frames (SMRF), special concentric braced frames (SCBF). Our staff incudes experts in the design of structures in regions of high winds, high seismic loads, high snow loads, extreme cold, as well as industry-specific specialty loads. We have engineers who are members of engineering organizations including ASCE, ACI, AISC and TIA-EIA.

Engineers at Vector have been retained on multiple occasions to provide expert witness services for the Utah Attorney General's Office as well as for private disputes related to structural engineering issues. In addition, our firm has performed the analysis on hundreds of existing structures to determine their ability to resist current code prescribed loads as well as proposed additional loads.

Coupled with an extensive structural engineering background, Vector also employs engineers with civil engineering experience. Engineers at Vector have designed site plans, grading plans, utility plans and roadway plan and profiles for commercial projects, residential communities, and multi-family projects. In addition, our engineers have performed drainage studies, master site planning, and engineered drainage structures, detention basins, storage tanks, and storm water pollution prevention plans. Our engineers have designed hundreds of retaining wall projects constructed of masonry, concrete, pre-cast blocks and boulders.

Engineers at Vector are proficient with commercially available analysis and design software packages such as RISA3d, RISA Foundation, RISA Connection, L-Pile, RetainPro, and TowerNx. Our CADD draftsmen are experts in preliminary framing layouts and utilize the most current editions of AutoCAD and Revit Structure. In addition, our engineers undergo regular in-house and outside training to establish and maintain expertise in various engineering fields.

SERVICE

Vector is a service-driven company. We keep our clients informed and we respond quickly to phone calls, RFI's, plan check comments, and submittals—maintaining a sense of urgency throughout each project. In addition, our experienced engineers are available to meet with clients in our office or on site. We take project schedules seriously and work with clients to make sure our timeline works within their project schedule. In addition, we understand that quick attention to service during construction is essential to keeping the overall project on schedule.

Engineers at Vector are trained to handle multiple projects at the same time while keeping priorities and schedules intact. This has allowed our experienced, service driven team to complete over 2,000 projects every year since 2013. Perhaps the most telling statistic related to our high level of service is the fact that over 90% of our business is generated from current satisfied clients and direct referrals.

Vector Engineers organizational structure is uniquely designed to effectively manage numerous small and medium sized projects. Projects are rapidly assigned to a project engineer who has the individual responsibility to ensure the project is completed accurately and on time. Every project is additionally assigned a supervising engineer who can assist in tracking progress, answer technical questions and communicate with the client. Every completed project is thoroughly back checked prior to shipping or emailing stamped drawings and calculations. The ability to effectively manage thousands of projects is enhanced by using a custom in-house developed intranet software program which tracks assignments, project progress, due dates, revisions to scope, budgets and allows real-time communication and notification. Vector Engineers has years of experience in completing thousands of projects for hundreds of clients on time and accurately.

QUALITY

Projects undergo a value engineering process after a preliminary review has been performed. Typically, this process allows the design team to consider subtle to significant changes that may save considerable construction costs. Prepared with the goal of solving challenges before construction begins, our construction documents are not cluttered or confusing but rather provide clear, accurate detailing and references. They are designed to be enabling and field-ready, not a painful IQ test for the contractor.